CLAIMS AMENDMENT

1-3. (canceled)

4. (currently amended): An antibody or antigen binding fragment thereof that specifically binds to a protein at least 90% homologous to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

5. (previously presented): The antibody or fragment thereof of claim 4, which is a monoclonal antibody.

6. (previously presented): The antibody or fragment thereof of claim 5, wherein the monoclonal antibody is recombinantly produced.

7. (previously presented): The antibody or fragment thereof of claim 4, wherein the antibody or fragment thereof is labeled with a detectable marker.

8. (canceled)

9. (previously presented): The antibody or fragment thereof of claim 4, wherein the fragment thereof is selected from the group consisting of Fab, F(ab')2, Fv and sFv fragment.

10. (previously presented): The antibody or fragment thereof of claim 4, wherein the antibody is a human antibody, a humanized antibody or a chimeric antibody.

11. (currently amended): A non-human transgenic animal that produces an antibody that specifically binds to a protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

12. (currently amended): A hybridoma that produces a monoclonal antibody that specifically binds to a protein having at least 90% homologous to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

13. (previously presented): The antibody or fragment thereof of claim 6, wherein the monoclonal antibody is a single chain monoclonal antibody.

14. (currently amended): A vector comprising a polynucleotide that encodes a single chain monoclonal antibody that specifically binds to a protein having at least 90% homology to SEQ ID NOS ~~NOS~~ NO: 743 ~~or 745~~.

15. (currently amended): A method of delivering an agent to a cell that expresses 161P2F10B, comprising:

providing the agent conjugated to an antibody or fragment thereof that specifically binds to a protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~; and,

exposing the cell to the antibody-agent or fragment-agent conjugate.

16-64. (canceled)

65. (currently amended): A method of generating a mammalian immune response directed to 161P2F10B (SEQ ID ~~NOS~~ NO: 743 ~~or 745~~), comprising:

exposing cells of the mammal's immune system to an immunogenic portion of

a) a protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~ and/or

b) a nucleotide sequence that encodes said protein,

whereby an immune response is generated to 161P2F10B.

66. (currently amended): The method of claim 65, wherein the protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~, wherein the protein comprises at least one T cell or at least one B cell epitope.

67. (currently amended): The method of claim 66 wherein the immune response comprises an induced B cell that generates antibodies that specifically bind the protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

68. (currently amended): The method of claim 66 wherein the immune response comprises activation of a cytotoxic T cell (CTL), whereby the activated CTL kills an autologous cell that expresses the protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

69. (previously presented): The method of claim 68 wherein the immune response comprises a helper T cell (HTL), whereby the activated HTL secretes cytokines that facilitate the cytotoxic activity of a cytotoxic T cell (CTL) or the antibody producing activity of a B cell.

70. (currently amended): An assay for detecting the presence of a protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~ in a biological sample and a normal sample obtained from a patient who has or who is suspected of having cancer, comprising:

contacting the biological sample and the normal sample with an antibody or fragment thereof that specifically binds to the protein having at least 90% homology to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~; and,

determining if the antibody binds to the biological sample or the normal sample, whereby binding indicates the presence of the protein..

71-74. (canceled)

75. (currently amended): A method for detecting expression levels of a 161P2F10B gene product in a biological sample and a normal sample obtained from a patient who has or who is suspected of having cancer, comprising:

determining expression levels of the 161P2F10B gene product in the biological sample and the normal sample obtained from the patient; and

comparing the expression levels of the 161P2F10B gene product detected in the biological sample and the normal sample obtained from the patient, wherein the 161P2F10B gene product is selected from the group consisting of 161P2F10B mRNA or a protein that is at least 90% identical to SEQ ID ~~NOS~~ NO: 743 ~~or 745~~.

76. (previously presented): The method of claim 75 whereby the presence of elevated gene products 161P2F10B mRNA or 161P2F10B protein in the biological sample relative to the normal sample indicates the presence of a cancer in the biological sample.

77. (previously presented): The method of claim 76 wherein the cancer occurs in a tissue selected from the group consisting of breast, colon, kidney, lung, ovary, pancreas, and prostate.

78. (previously presented): The antibody or fragment thereof of claim 4 which is labeled with an agent.

79. (previously presented): The antibody or fragment thereof of claim 78, wherein the agent is a diagnostic agent or a cytotoxic agent.

80. (previously presented): The antibody or fragment thereof of claim 79, wherein the cytotoxic agent is selected from the group consisting of radioactive isotopes, chemotherapeutic agents and toxins.

81. (currently amended): The antibody or fragment thereof of claim 80, wherein the radioactive isotope is selected from the group consisting of ~~At^{211}, I^{131}, I^{125}, Y^{90}, Re^{186}, Re^{188}, Sm^{153}, Bi^{212}, P^{32}~~ ^{211}At, ^{131}I, ^{125}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{153}Sm, ^{212}Bi, ^{32}P and radioactive isotopes of Lu.

82. (previously presented): The antibody or fragment thereof of claim 80, wherein the chemotherapeutic agent is selected from the group consisting of taxol, actinomycin, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicine, gelonin, and calicheamicin.

83. (previously presented): The antibody or fragment thereof of claim 80, wherein the toxin is selected from the group consisting of diphtheria toxin, enomycin, phenomycin, Pseudomonas exotoxin (PE) A, PE40, abrin, abrin A chain, mitogellin, modeccin A chain, and alpha-sarcin.

84. (previously presented): The method of claim 15, which is labeled with an agent.

85. (previously presented): The method of claim 15, wherein the agent is a diagnostic agent or a cytotoxic agent.

86. (previously presented): The method of claim 85, wherein the cytotoxic agent is selected from the group consisting of radioactive isotopes, chemotherapeutic agents and toxins.

87. (currently amended): The method of claim 86, wherein the radioactive isotope is selected from the group consisting of ~~At^{211}, I^{131}, I^{125}, Y^{90}, Re^{186}, Re^{188}, Sm^{153}, Bi^{212}, P^{32}~~ ^{211}At, ^{131}I, ^{125}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{153}Sm, ^{212}Bi, ^{32}P and radioactive isotopes of Lu.

88. (previously presented): The method of claim 86, wherein the chemotherapeutic agent is selected from the group consisting of taxol, actinomycin, mitomycin, etoposide, tenoposide, vincristine, vinblastine, colchicine, gelonin, and calicheamicin.

89. (previously presented): The method of claim 86, wherein the toxin is selected from the group consisting of diphtheria toxin, enomycin, phenomycin, Pseudomonas exotoxin (PE) A, PE40, abrin, abrin A chain, mitogellin, modeccin A chain, and alpha-sarcin.